AMENDMENT TO THE CLAIMS

1. (Currently Amended) An apparatus for managing data corresponding to a plurality of reticles in a semiconductor manufacturing system including a plurality of processing stages, the apparatus comprising:

a central reticle database configured and arranged to store data associated with each of the plurality of reticles;

a reticle management controller coupled to the central reticle database, the reticle management controller configured and arranged to store and retrieve data from the central reticle database;

a stocker including a stocker controller, a stocker database, and a plurality of storage locations configured and arranged to store at least one of the plurality of reticles, the stocker controller coupled to the stocker database, the stocker controller configured and arranged to store at least a portion of the plurality data corresponding to the at least one of the plurality of reticles stored within the plurality of storage locations within the stocker database; and

the reticle management controller coupled to the stocker controller, the reticle management controller configured and arranged to ~~receive from~~ retrieve at least a portion of the data stored within the central reticle database corresponding to each of the at least one reticles stored within the plurality of storage locations and to provide the retrieved data~~,~~ to the stocker controller, wherein the stocker controller stores the retrieved data within the stocker database, ~~at least a portion of the plurality data corresponding to each of the at least one of~~

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~~the plurality of reticles stored within the plurality of storage locations.~~

2. (Original) The apparatus of claim 1 wherein the data corresponding to each of the plurality of reticles stored in the central reticle database includes a plurality of reticle identifying data.

3. (Original) The apparatus of claim 2 wherein the plurality of reticle identifying data includes:

an attribute identifying the reticle;

an attribute identifying the location of the reticle.

4. (Original) The apparatus of claim 3 wherein the plurality of reticle identifying data further includes:

an attribute identifying a reticle carrier housing the reticle;

an attribute identifying a the date and time the reticle was entered into use; and

an attribute identifying a user identifier who created the reticle.

5. (Original) The apparatus of claim 1 wherein the data corresponding to each of the plurality of reticles stored in the central reticle database includes a plurality of reticle history data.

6. (Original) The apparatus of claim 1 wherein the data corresponding to each of the plurality of reticles stored in the

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central reticle database includes a plurality of reticle history data includes:

an attribute identifying the number of times the reticle has been retrieved;

an attribute identifying the date the reticle was last retrieved;

an attribute identifying the number of times the reticle has been stored; and

an attribute identifying the date the reticle was last stored.

7. (Original) The apparatus of claim 1 wherein the data corresponding to each of the plurality of reticles stored in the central reticle database includes a plurality of reticle history data further includes:

an attribute identifying a user identifier who last selected the reticle; and

an attribute identifying a user identifier who last stored the reticle.

8. (Original) The apparatus of claim 1 wherein the data corresponding to each of the plurality of reticles stored in the central reticle database includes a plurality of reticle maintenance data.

9. (Currently Amended). The apparatus of claim 8 wherein the data corresponding to each of the plurality of reticles stored in the central reticle database includes a plurality of reticle maintenance data includes:

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an attribute identifying the number of times the reticle has been cleaned;

an attribute identifying the date on which the reticle was last cleaned;

an attribute identifying the number of times the reticle was inspected; and

an attribute identifying the date on which the reticle was last inspected.

10. (Original) The apparatus of claim 9 wherein the plurality of reticle maintenance data further includes:

an attribute identifying a user identifier who last cleaned the reticle;

an attribute identifying a location where the reticle was last cleaned;

an attribute identifying a user identifier who last inspected the reticle; and

an attribute identifying a location where the reticle was last inspected.

11. (Original) The apparatus of claim 1 further including:

a central system database configured and arranged to store data corresponding to the system requirements of the plurality of reticles; and

the reticle management controller coupled to the central system database, the reticle management controller configured and arranged to store and retrieve system data from the central system database.

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12. (Original) The apparatus of claim 11 wherein the data corresponding to the system requirements of the plurality of reticles includes:

an attribute identifying the maximum number of cleanings of a reticle;

an attribute identifying the maximum number of inspections of a reticle;

an attribute identifying the maximum number of uses of a reticle between inspections; and

an attribute identifying the maximum number of uses of a reticle between cleaning.

13. (Original) The apparatus of claim 11 wherein the data corresponding to the system requirements of the plurality of reticles includes:

an attribute identifying the maximum time between inspections of a bare reticle; and

an attribute identifying the maximum time between cleanings of a bare reticle.

14. (Original) The apparatus of claim 11 wherein the data corresponding to the system requirements of the plurality of reticles includes:

an attribute identifying the maximum time between inspections of a kitted reticle; and

an attribute identifying the maximum time between cleanings of a kitted reticle.

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15. (Original)   The apparatus of claim 1 further including a plurality of stockers, each of the plurality of stockers including a stocker controller, a stocker database, and a plurality of storage locations configured and arranged to store at least one of the plurality of reticles, the stocker controller configured and arranged to collect at least a portion of the plurality data corresponding to each of the at least one of the plurality of reticles stored within the plurality of storage locations and to store the at least a portion of data within the stocker database; and

the reticle management controller coupled to each of the plurality of stocker controllers, the reticle management controller configured and arranged to receive from each of the plurality of stocker controllers and to provide to each of the plurality of stocker controllers, at least a portion of the plurality data corresponding to each of the at least one of the plurality of reticles stored within the plurality of storage locations corresponding to each of the plurality of stockers.

16. (Currently Amended)   An apparatus for managing a plurality of reticles in a semiconductor manufacturing system including a plurality of processing stages, the apparatus comprising:

a central reticle database configured and arranged to store data corresponding to each of the plurality of reticles;

a reticle management controller coupled to the central reticle database, the reticle management controller configured and arranged to store and retrieve data from the central database;

a stocker unit including a stocker controller, a stocker database, and a plurality of storage locations configured and

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arranged to store at least one of the plurality of reticles, ~~the stocker controller configured and arranged to collect at least a portion of the plurality data corresponding to each of the at least one of the plurality of reticles stored within the plurality of storage locations and to store the at least a portion of data within the stocker database~~;

the reticle management controller coupled to the stocker controller, the reticle management controller configured and arranged to ~~receive from~~ retrieve at least a portion of the data stored within the central reticle database corresponding to each of the at least one reticles stored within the plurality of storage locations and to provide ~~to at least a portion of the plurality~~ the retrieved data to the stocker controller, wherien the stocker controller stores the retrieved data within the stocker database ~~corresponding to each of the at least one of the plurality of reticles stored within the plurality of storage locations~~;

a reticle moving system configured and arranged to load a reticle at the stocker and deliver the reticle to a destination; and

the reticle management controller coupled to the reticle moving system, the reticle management controller configured and arranged to provide one or more move commands to the reticle move system, the reticle move system configured and arranged to receive the one or more move commands and operative to execute the one or more move commands.

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17. (Original) The apparatus of claim 16 wherein the stocker unit is a first stocker unit, and wherein move command includes a command to store the reticle at a second stocker unit.

18. (Original) The apparatus of claim 16 wherein the move command includes a command to retrieve the reticle from a second stocker unit.

19. (Original) The apparatus of claim 16 wherein the move command includes a command to retrieve the reticle from a second stocker unit, move the reticle to the first stocker unit, and to store the reticle at the first stocker unit.

20. (Original) An apparatus for managing data corresponding to a plurality of reticles in a semiconductor manufacturing system including a plurality of processing stages, the apparatus comprising:

a central reticle database configured and arranged to store data associated with each of the plurality of reticles; and

a reticle management controller coupled to the central reticle database, the reticle management controller configured and arranged to store and retrieve data from the central reticle database.

21. (Original) The apparatus of claim 20 wherein the data corresponding to each of the plurality of reticles stored in the central reticle database includes a plurality of reticle identifying data.

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22. (Original) The apparatus of claim 21 wherein the plurality of reticle identifying data includes:

　　　an attribute identifying the reticle; and

　　　an attribute identifying the location of the reticle.

23. (Original) The apparatus of claim 22 wherein the plurality of reticle identifying data further includes:

　　　an attribute identifying a reticle carrier housing the reticle;

　　　an attribute identifying a the date and time the reticle was entered into use; and

　　　an attribute identifying a user identifier who created the reticle.

24. (Original) The apparatus of claim 20 wherein the data corresponding to each of the plurality of reticles stored in the central reticle database includes a plurality of reticle history data.

25. (Original) The apparatus of claim 20 wherein the data corresponding to each of the plurality of reticles stored in the central reticle database includes a plurality of reticle history data includes:

　　　an attribute identifying the number of times the reticle has been retrieved;

　　　an attribute identifying the date the reticle was last retrieved;

　　　an attribute identifying the number of times the reticle has been stored; and

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an attribute identifying the date the reticle was last stored.

26. (Original) The apparatus of claim 20 wherein the data corresponding to each of the plurality of reticles stored in the central reticle database includes a plurality of reticle history data further includes:

an attribute identifying a user identifier who last selected the reticle; and

an attribute identifying a user identifier who last stored the reticle.

27. (Original) The apparatus of claim 20 wherein the data corresponding to each of the plurality of reticles stored in the central reticle database includes a plurality of reticle maintenance data.

28. (Original) The apparatus of claim 27 wherein the data corresponding to each of the plurality of reticles stored in the central reticle database includes a plurality of reticle maintenance data includes:

an attribute identifying the number of times the reticle has been cleaned;

an attribute identifying the date on which the reticle was last cleaned;

an attribute identifying the number of times the reticle was inspected; and

an attribute identifying the date on which the reticle was last inspected;

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29. (Original) The apparatus of claim 28 wherein the plurality of reticle maintenance data further includes:

an attribute identifying a user identifier who last cleaned the reticle;

an attribute identifying a location where the reticle was last cleaned;

an attribute identifying a user identifier who last inspected the reticle; and

an attribute identifying a location where the reticle was last inspected.

30. (Original) The apparatus of claim 20 further including:

a central system database configured and arranged to store data corresponding to the system requirements of the plurality of reticles; and

the reticle management controller coupled to the central system database, the reticle management controller configured and arranged to store and retrieve system data from the central system database.

31. (Original) The apparatus of claim 30 wherein the data corresponding to the system requirements of the plurality of reticles includes:

an attribute identifying the maximum number of cleanings of a reticle;

an attribute identifying the maximum number of inspections of a reticle;

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an attribute identifying the maximum number of uses of a reticle between inspections; and

an attribute identifying the maximum number of uses of a reticle between cleaning.

32. (Original) The apparatus of claim 30 wherein the data corresponding to the system requirements of the plurality of reticles includes:

an attribute identifying the maximum time between inspections of a bare reticle; and

an attribute identifying the maximum time between cleanings of a bare reticle.

33. (Original) The apparatus of claim 30 wherein the data corresponding to the system requirements of the plurality of reticles includes:

an attribute identifying the maximum time between inspections of a kitted reticle; and

an attribute identifying the maximum time between cleanings of a kitted reticle.

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